

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13 (cancelled).

14. (new): A laser active optronic system, comprising:

a channel for the emission by an emission source of a laser beam illuminating a target and a channel for receiving the wave backscattered by the target, wherein an optical switching device is positioned in the receive channel, said optical switching device receiving said backscattered wave and comprising an optical gain medium and pumping means for pumping said gain medium, said gain medium being absorbent at the wavelength of the laser and becoming substantially transparent when it is pumped, in such a way as to allow the switching device to be actuated in the on mode or off mode respectively, in that it further includes a control unit for controlling the pumping means, allowing the switching device to be actuated in the on mode in at least one temporal window of predetermined duration, triggered at a predetermined instant after the start of emission of the illuminating laser beam.

15. (new): The optronic system as claimed in claim 14, wherein the gain medium, when it is pumped, furthermore generates a backscattered wave amplification effect.

16. (new): The optronic system as claimed in claim 14, wherein the pumping means are optical pumping means comprising a source for emitting a pump beam intended for pumping the gain medium.

17. (new): The optronic system as claimed in claim 16, wherein the source for emitting the pump beam means is extracted from the source for emitting the target-illuminating beam.

18. (new): The optronic system as claimed in claim 14, wherein the optical switching device is positioned near an intermediate focal plane.

19. (new): An active imaging optronic system as claimed in claim 17, wherein the gain medium is formed from a uniform block and in that the pumping means are optical pumping means comprising a source for emitting a pump beam and a spatial light modulator to which said pump beam is sent, making it possible for the various regions of the gain medium, which are distributed over the entire block in a two-dimensional matrix, to be selectively actuated.

20. (new): The active imaging optronic system as claimed in claim 18, wherein the gain medium is arranged in the form of a matrix of optical-gain elements, it being possible for said elements to be pumped selectively by said pumping means.

21. (new): The optronic system as claimed in claim 14, wherein the gain medium is a semiconductor material.

22. (new): The optronic system as claimed in claim 21, wherein the gain medium is a semiconductor material pumped by optical pumping means.

23. (new): The optronic system as claimed in claim 21, wherein the gain medium is a semiconductor material pumped by electrical pumping means.

24. (new): The optronic system as claimed in claim 21, in which said semiconductor material is of the GaInAsP type, the composition of which is adapted according to the wavelength of the emission laser beam.

25. (new): The optronic system as claimed in claim 14, wherein the gain medium is a material having three transition levels.

26. (new): The optronic system as claimed in claim 24, wherein the gain medium contains erbium ions, the pumping means are optical pumping and operates at 0.98 or 1.48 microns.

27. (new): The optronic system as claimed in claim 14, wherein the control unit is programmed to actuate the switching device in on mode according to several temporal windows corresponding to different distance doors for analyzing a scene in three dimensions.